by Bob Saydlowski Jr.

Getting Your Heads Together

There is more to tuning a drum than tightening up the head until it "sounds right" and "feels right" under your sticks. A brief guide to drum tuning is actually a tough proposition, since the subject has many facets and options. But let's give it a shot.

Single-headed drums are easier to tune than double-headed drums. The batter head of a single-head tom gives both pitch and playing/rebound surface—there is no concussion of air to vibrate a second drumhead. On double-headed toms, the top head is primarily tensioned for your playing surface, while the bottom head is tuned for the pitch of the drum. There must be a harmonic relationship between the two drumheads, or you will get discordant overtones.

There should be a definite kinship between all drums in the kit as well. While there is no real need to tune the drums to specific notes (Ab, Eb, Bb. etc.), the combination should sound like a "set." Naturally a 9 x 13 tom should sound lower than an 8 x 12 tom. All the drums should have a pleasing pitch relationship, as well as overall tonal similarity. My own drumkits get tuned by ear, and while there may be a definite pitch relationship to form a chord, I'm not aware of it while tuning. However, some drummers do tune to exact pitches. One player I know says he knows his drums are tuned the way he likes when he can play "In The Mood" on the toms. Other drummers tune to intervals of fourths, fifths, etc. There is no hard and fast rule.

The preferred method of drum tuning is illustrated in Fig. 1. This is called "cross-tensioning." This method pulls the drumhead down evenly on the shell, and safeguards against distorting the roundness of the head.

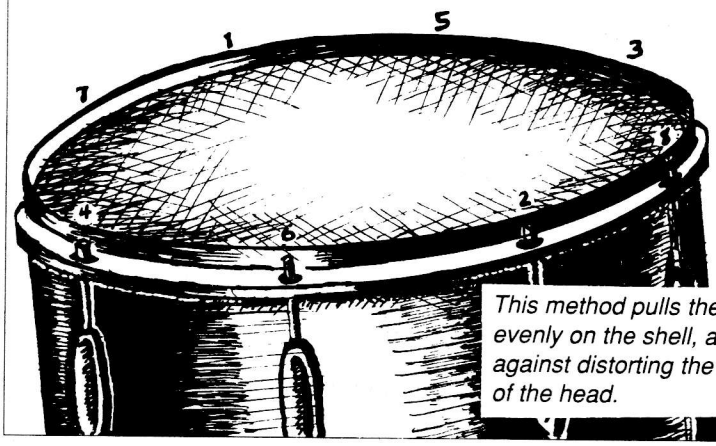
Pick any lug as your starting point, and tighten the rod to a medium tension. Go to the rod directly across from it, and tension it equally. Continue in this manner until all rods are tensioned. Tap the head with your finger about 1/2" from the first rod and listen to the pitch. As before, go to the rod across from it, tap the head, and compare the pitch. The two should be the same. An adjustment with your drum key may be necessary in order to have both spots sounding an identical pitch. After all lug points are tuned in this manner, the head should now be in tune with itself. (By the way, certain tools are claimed to provide exact tensioning/tuning, such as the Neary Drum Torque and the May-EA T.A.P.)

Since the batter head is serving as your rebound surface, you may want to re-tune it for a harder or softer feel. Keep in mind, though, that its tightness will affect the drum's pitch. The bottom (resonant) head is also tuned using the cross-tensioning method. It is more critical to have the bottom head in tune, first for the pitch, and second so that its overtones don't clash with the top head. Each drum has its own tuning range, depending on its dimensions, and there is one "sweet spot" in the tensioning, at which the drum resonates longest. With a properly tuned drum, it should be easy to find it.

De-tuning drumheads at certain locations can work too, for different kinds of effects. For a funkier sound on toms, try backing off the top two rods closest to you, one-half turn. On bass drums, back off the top two rods for a flatter sound.

Snare drums pose a slightly different tuning situation. A tightly tensioned bottom head will help produce a snappy, crisp sound. A lightly tensioned bottom head will provide a lower pitch, but there's more chance of snare rattle, due to sympathetic vibration. Speaking of sympathetics, if your snare buzzes

CROSS-TENSIONING



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excessively when you hit another drum, the cause is probably that both drums are tuned close to the same pitch. The simple solution is to retune one of them, higher or lower.

New drumheads bring their own problems. Just as a guitarist stretches out his new strings, you should stretch a new drumhead. To get a new head to tune up more quickly, tighten it up almost all the way, and then press up and down with your palms at parallel points. (The cracking you hear is the glue separating from the drumhead hoop.) You may have to do this a few times, but the head will seat itself more easily, and will hold a consistent tuning.

Tuning problems can have a number of possible causes. Dented or worn-out drum heads, and heads stretched past their maximum will not tune up accurately. Warped hoops, or an out-of-round shell will drastically affect tuning, as will an uneven bearing edge. (Never attempt to repair an uneven bearing head by yourself—take the drum to a professional!)

If you're a heavy rimshot player, you may find some of your rods backing off as you play. Of course, this detunes the drum. Many companies make counterlock nuts to combat this, such as Lug-Lock, Ludwig, Pearl, etc.

The sound of your drums depends on many variables: the shell material and size, the type of drumhead and stick, the room you're playing in, and, just as important, your ear. Listen to as many records and live drummers as you can, to form your own ideas of what you want your drums to sound like. It's common sense that a badly tuned drumkit will sound bad, and a properly tuned kit will sound better. With a little practice and some critical listening, your drums will sound as good as they possibly can.

Bob Saydlowski has played drums for 19 years, and is a regular contributor to GIG Magazine and Modern Drummer.